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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/612,418	07/07/2000	Raymond P. Johnston	54971USA3A.006	8574
32692	7590	06/08/2004	EXAMINER	
3M INNOVATIVE PROPERTIES COMPANY PO BOX 33427 ST. PAUL, MN 55133-3427			MARSCHER, ARDIN H	
			ART UNIT	PAPER NUMBER

1631

DATE MAILED: 06/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/612,418

Applicant(s)

JOHNSTON ET AL.

Examiner

Ardin Marschel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2003 and 21 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9,13,39-41,43-46,50,53,54,60,61,72-75,77 and 81-85 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9,13,39-41,43-46,49,50,53,54,60,61,72-75,77 and 81-85 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. <u>6/7/04</u> . |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____. | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

As noted in the Examiner Interview Summary of 6/7/04, the citation of prior art to Alajoki et al. was mistakenly repeated for both prior art rejections. This Office action is being mailed to correct the second prior art citation to that of Christian (P/N 4,673,657). Otherwise the content of the Office action, mailed 4/7/04, is repeated. The response time is restarted as of the mailing date of this action.

Applicants' arguments, filed 1/21/04, have been fully considered but they are not deemed to be persuasive. Rejections and/or objections not reiterated from previous office actions are hereby withdrawn. The following rejections and/or objections are either reiterated or newly applied. They constitute the complete set presently being applied to the instant application.

NEW MATTER

Claims 1-9, 13, 39-41, 43-46, 49, 50, 53, 54, 60, 61, 72-75, 77, and 81-85 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Applicants have amended claim 1 to now cite the spontaneous fluid transport of a fluid sample from the acquisition zone to the detection zone and have pointed to the specification as filed at page 18, lines 15-23, for written support. Consideration of said page 18 citation reveals that there is therein a generic disclosure of spontaneous fluid

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transport in certain of the fluid control films usable in the present invention along the axis of film channels but nothing is disclosed regarding the now specific limitation in instant claim 1 regarding acquisition zone to detection zone transport. Such a generic disclosure does not provide written basis for a specific limitation as amended into claim 1 which therefore is NEW MATTER. Claims dependent directly or indirectly from claim 1 also contain this NEW MATTER via their dependence. This rejection is necessitated by amendment.

PRIOR ART

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3, 5-7, 13, 39-41, 43-46, 53, 54, 60, 61, 72-75, 81, and 83-85 are rejected under 35 U.S.C. 102(e)(2) as being clearly anticipated by Alajoki et al. (P/N 6,416,642).

This rejection is maintained and reiterated from the previous office action, mailed 8/18/03. Applicants only argument regarding this reference is directed to the NEW MATTER limitations as described above. Because the spontaneous fluid transport limitation now in claim 1 is NEW MATTER, this rejection is maintained and reiterated in

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anticipation of removal of the noted NEW MATTER thus leaving the instant claims rejected as before. Even if the amended form of claim 1 were to ultimately be viewed as not containing NEW MATTER, applicants are hereby informed that this rejection would be maintained. Applicants pointed to page 18, lines 15-23, regarding a description of what is meant by the practice of spontaneous fluid transport limitations now in instant claim 1. Consideration of this section of said specification reveals that structure or topography of the surface of the microchannels and nature of the film surface influence spontaneous fluid transport. Applicants also admit that this reference describes placing absorbent material downstream from the fluid to regulate fluid flow. Such absorbent material is reasonably interpreted as one of applicants' own factors influencing spontaneous fluid transport, that being "structure or topography of the surface (e.g., capillarity, shape of the channels)". An absorbent material is absorbent via its structure and material shape thus making capillarity therein which is reasonably thus a spontaneous fluid transport practice as also instantly claimed. The other factor cited on said page 18 of the instant specification is "nature of the film surface (e.g., surface energy)". An absorbent material is clearly a particular "nature" of a film surface and adds significant surface energy for fluid absorbance thus also supporting this rejection even as the claims are presently amended.

Claims 1-7, 39-41, 43-46, 49, 50, 53, 54, 60, 61, 72-75, 81, and 83-85 are rejected under 35 U.S.C. 102(e)(2) as being clearly anticipated by Christian (P/N 4,673,657).

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This rejection is maintained and reiterated from the previous office action, mailed 8/18/03. Applicants only argument regarding this reference is directed to the NEW MATTER limitations as described above. Because the spontaneous fluid transport limitation now in claim 1 is NEW MATTER, this rejection is maintained and reiterated in anticipation of removal of the noted NEW MATTER thus leaving the instant claims rejected as before. Even if the amended form of claim 1 were to ultimately be viewed to not contain NEW MATTER, this rejection would be maintained. Applicants argue that the solenoid roller squeezes sample and forces fluid movement and is not a spontaneous fluid transport. In response there is no limitation regarding what is meant for spontaneous fluid transport on page 18 of the specification which negates such a roller practice. Also, the factors which are apparently defining of such transport still are present in the reference. The roller practice changes the structure or topography of the channel and the nature of the film surface permits fluid flow under the roller pressure thus supporting this rejection.

No claim is allowed.

Applicants' amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicants are reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Papers related to this application may be submitted to Technical Center 1600 by facsimile transmission. Papers should be faxed to Technical Center 1600 via the Central PTO Fax Center. The faxing of such papers must conform with the notices published in the Official Gazette, 1096 OG 30 (November 15, 1988), 1156 OG 61 (November 16, 1993), and 1157 OG 94 (December 28, 1993)(See 37 CFR § 1.6(d)). The Central PTO Fax Center number is (703) 872-9306.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ardin Marschel, Ph.D., whose telephone number is (571) 272-0718. The examiner can normally be reached on Monday-Friday from 8 A.M. to 4 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward, Ph.D., can be reached on (571) 272-0722.

Any inquiry of a general nature or relating to the status of this application should be directed to Legal Instrument Examiner, Tina Plunkett, whose telephone number is (571) 272-0549.

June 7, 2004

Ardin H. Marschel 6/7/04
ARDIN H. MARSCHEL
PRIMARY EXAMINER